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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,855	03/30/2004	Larry Williams	ALD-0001D2C2	2347

7590 07/22/2004

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EXAMINER	
ASSOUAD, PATRICK J	
ART UNIT	PAPER NUMBER
2857	

DATE MAILED: 07/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/811,855	WILLIAMS ET AL.	
	Examiner	Art Unit	
	Patrick J Assouad	2857	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 3/30/04

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-28 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-28 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 3/30/04 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3/30/04
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Levy ('991) published 10/5/99.

3. Levy disclose an intelligent outdoor lighting control system. Various Figures from Levy are reproduced below for ease in understanding this rejection. From the Levy Abstract:

> A new and improved outdoor lighting control system for an outdoor lighting system network for automatically sensing, conveying, and recording data relevant to the operation of the lighting system network so that both control and maintenance can be performed more efficiently. At each of plural lamp locations in the network, there is a controller module that receives electric power input and that supplies electric power to the remaining lamp locations. Each controller module has a first relay to deliver current to one or more outdoor illumination lamps at the controller module's location, and a second relay for switching electric power on to a succeeding lamp location. A first current sensor monitors current to the lamps at each lamp location, and a second current sensor monitors current to the remaining locations. The network's power lines form portions of a bi-directional data link via which data is transmitted from each controller module to a command station, and vice versa.

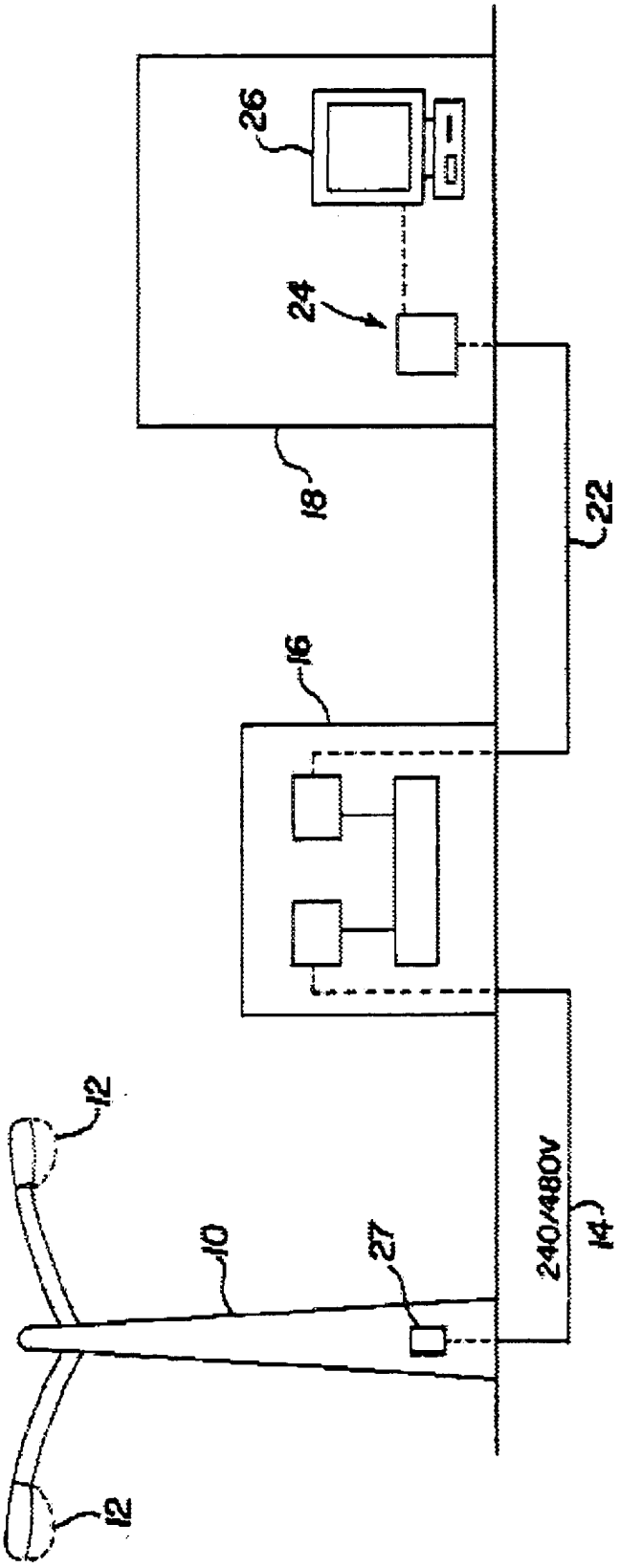

Fig. 1

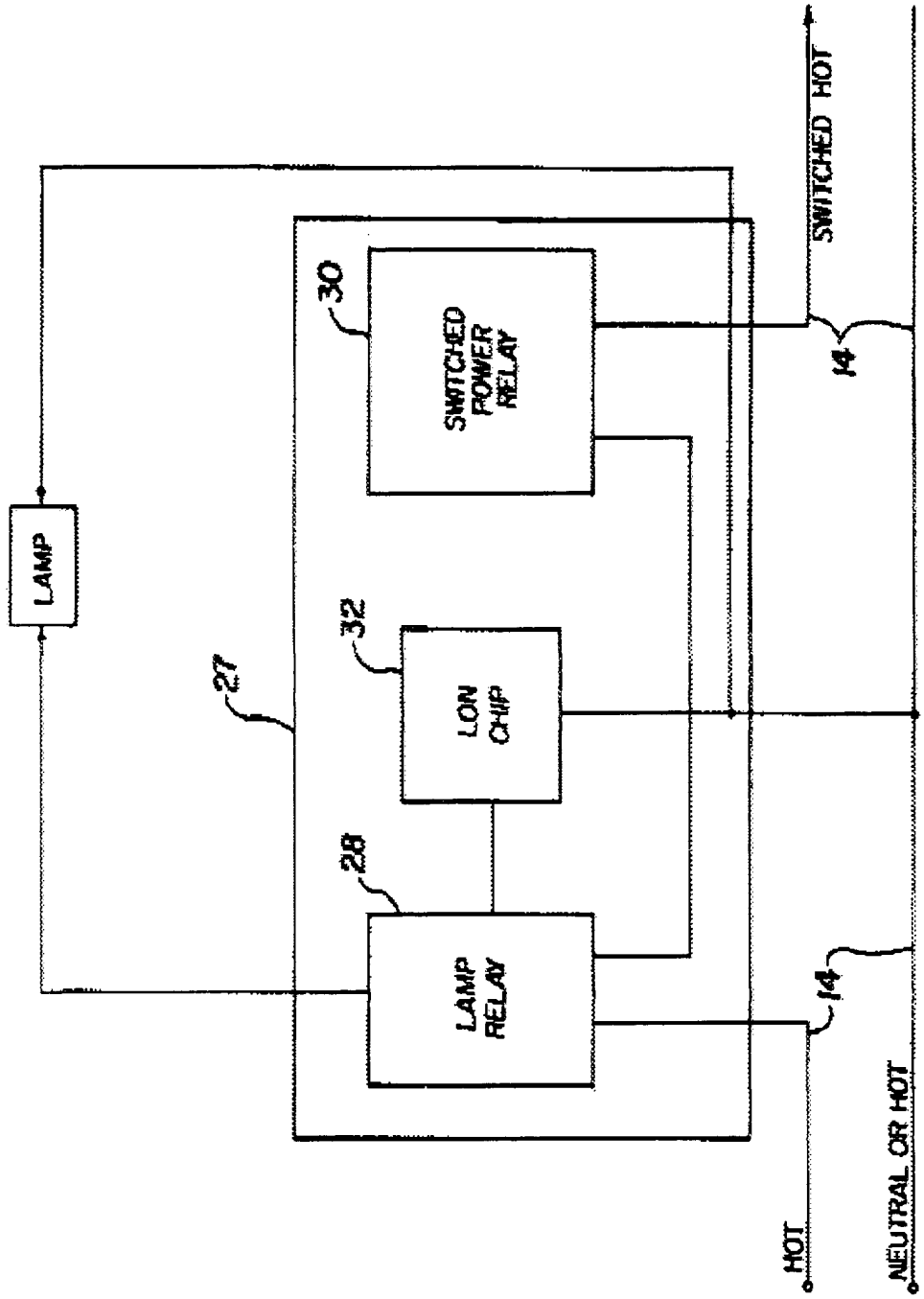
LAMP
27
30
SWITCHED POWER RELAY
32
LON CHIP
28
LAMP RELAY
14
14
SWITCHED HOT
HOT
NEUTRAL OR HOT

Fig. 2

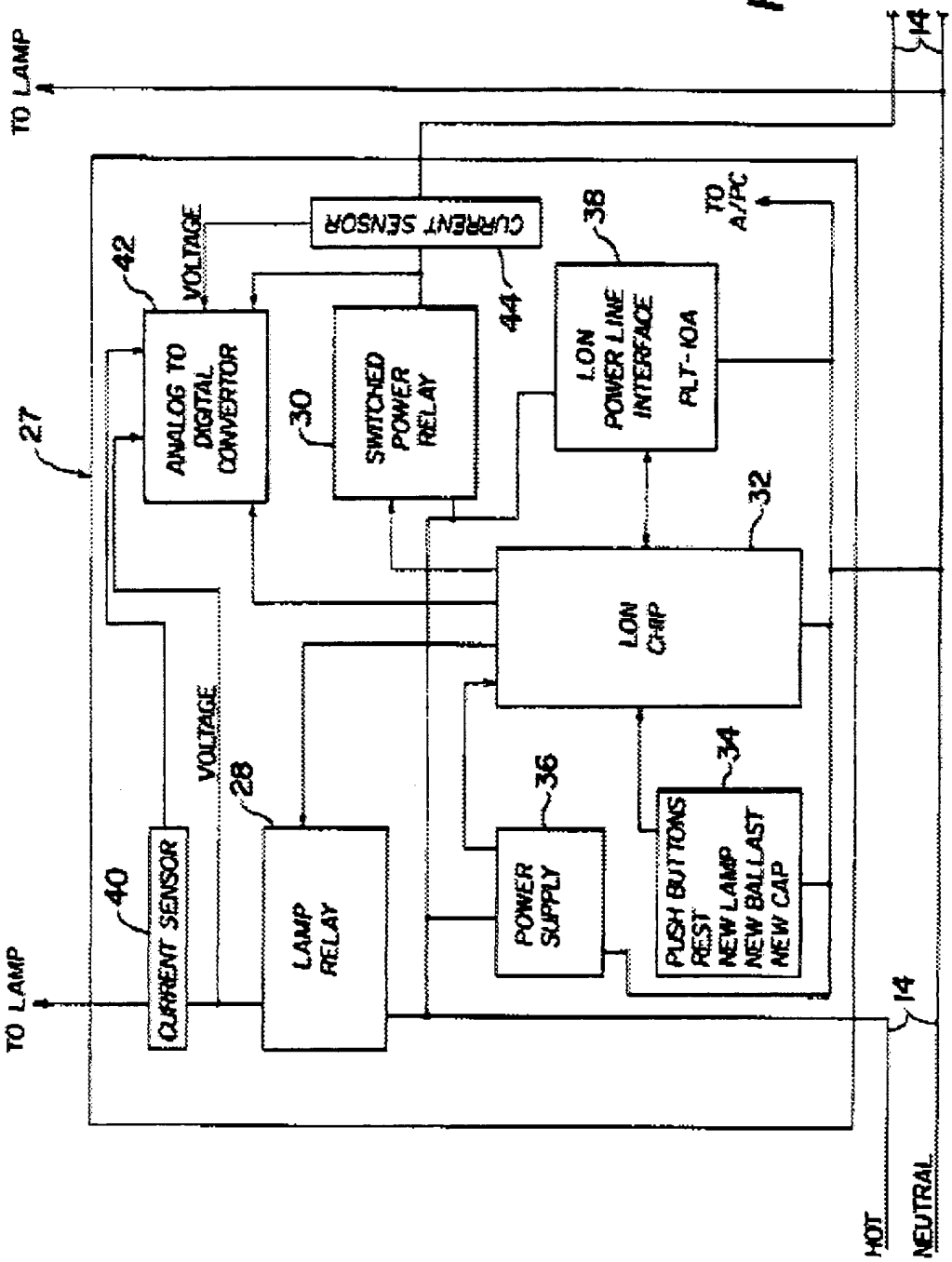
TO LAMP
14
CURRENT SENSOR
38
TO A/PC
42
VOLTAGE
44
ANALOG TO DIGITAL CONVERTOR
30
SWITCHED POWER RELAY
LON POWER LINE INTERFACE PLT-10A
27
32
LON CHIP
VOLTAGE
28
36
34
PUSH BUTTONS REST NEW LAMP NEW BALLAST NEW CAP
40
CURRENT SENSOR
LAMP RELAY
POWER SUPPLY
TO LAMP
14
HOT
NEUTRAL

Fig. 3

This covers the design of a lighting controller, based on a network of HID lamps and a computer to monitor their status. The controllers shall fit in a junction box at the base of the lights and turn on and off power to the lamps and to subsequent units. They shall communicate with a computer at least once a minute, but allowances will be made for an alarm mode. The controller functions are:

Turn Lamp On
Turn Lamp Off
Turn Next Unit On
Turn Next Unit Off
Measure Lamp Current (Zero or very low upon burnout)
Measure Lamp Voltage
New Lamp/Ballast/Capacitor Installed
Send Alarm, shut down subsequent circuit if shorted
Measure Lamp Phase Angle?

A computer software (typically in the electrical control room) will have the following functions:

Log Time since Installation for each lamp, operating hours and days since installation
Log Alarm Events
Read Photocell Information
Turn on Lamps at particular times/Photocell Levels/in programmable sequence
Read Current/Voltage for each Lamp
Show which lamps are inoperable
Show High Pressure Sodium Lamps which cycle when turned on.
Turn back on Lamps in sequence to find a short/open
Emergency Ballout, short/open/lamp burnout

Fig. 7

4. The correspondence between Levy (claim 1) and the instant claimed invention is as follows:

a) a processing and sensing unit... and to control power to said lamp assembly is element 27 of Fig.2 which includes a LON chip 32, a lamp relay 28 and a switched power relay 30 and numerous sensors;

b) a transmit unit to transmit... and a receive unit to receive remote control information are the LON chip communicating via power line interface 38 to a central control room.

5. As per dependent claims 2-3, see at least the aforementioned remote central control room 18 of Levy. Particular attention should also be drawn to col. 4, lines 6-8 regarding "the PC [which] may be located elsewhere and connected via suitable means, including for example telemetry and/or modems, with the interface to the power line 22."

As per dependent claim 4, see at least Fig 8 regarding examples of various commands processed by the LON chip; e.g. "turn on Next lamp", "lamp off", Lamp on", "diagnostics", etc.

As per dependent claims 5-7 and 10-11, see at least the current sensors and "overcurrent interrupt"-discussion in col. 6 of Levy. Also note the local "push buttons" 34 and local current and voltage sensors.

As per dependent claim 13, the LON chip of Levy is a programmed processor.

As per dpendent claim 14, see at least the plurality of lamps of Fig. 1.

As per dependent claim 15, see at least the aforementioned lamp relay and power supply of Levy.

6. Claims 16-17, 19, and 21-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Argyroudis ('758) published 4/6/99.

Argyroudis discloses:

> A concentrated subscriber wireless remote telemetry system which uses low-cost remote communication devices operating on existing wireless communication systems in order to provide real-time reading and control of remote devices. The metering system comprises at least one powerline remote metering device which collects and forwards telemetry data to an associated wireless remote telemetry device. The wireless remote telemetry device relays the telemetry data to a central controller over existing wireless communication systems, such as cellular base stations, using existing communication standards. The wireless remote metering device transmits various messages over a shared random access channel to the central controller. The central controller transmits messages to the wireless remote metering unit over a paging channel. The wireless remote metering unit may operate in a half-duplex mode only. Furthermore, the wireless remote metering unit may provide a gateway to advanced consumer services at the remote location.

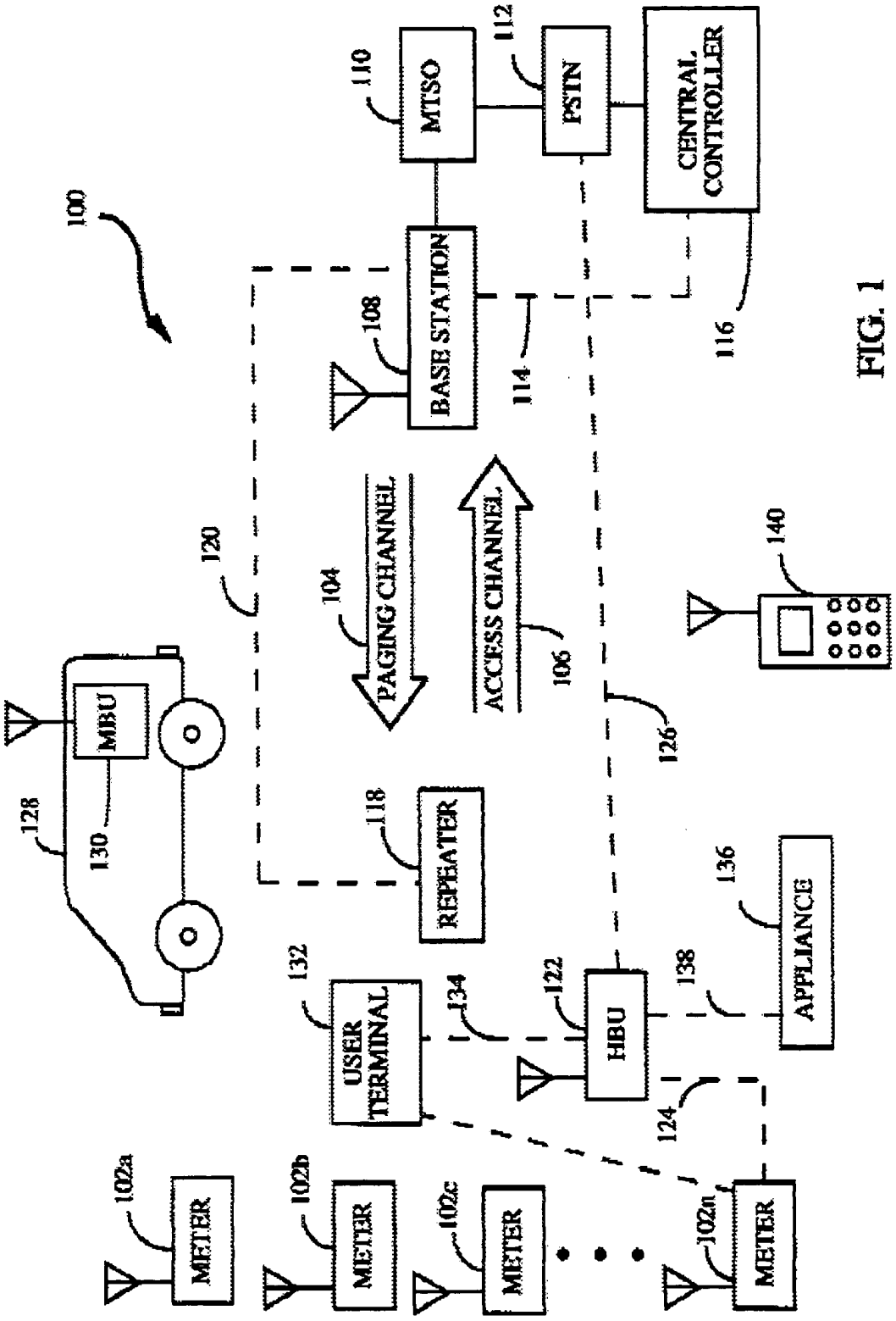
100
110
MTSO
112
PSTN
CENTRAL CONTROLLER
108
BASE STATION
114
116
120
104
PAGING CHANNEL
ACCESS CHANNEL
106
140
MBU
128
130
118
REPEATER
126
132
USER TERMINAL
134
122
HBU
136
APPLIANCE
138
124
102a
METER
102b
METER
102c
METER
102n
METER

FIG. 1

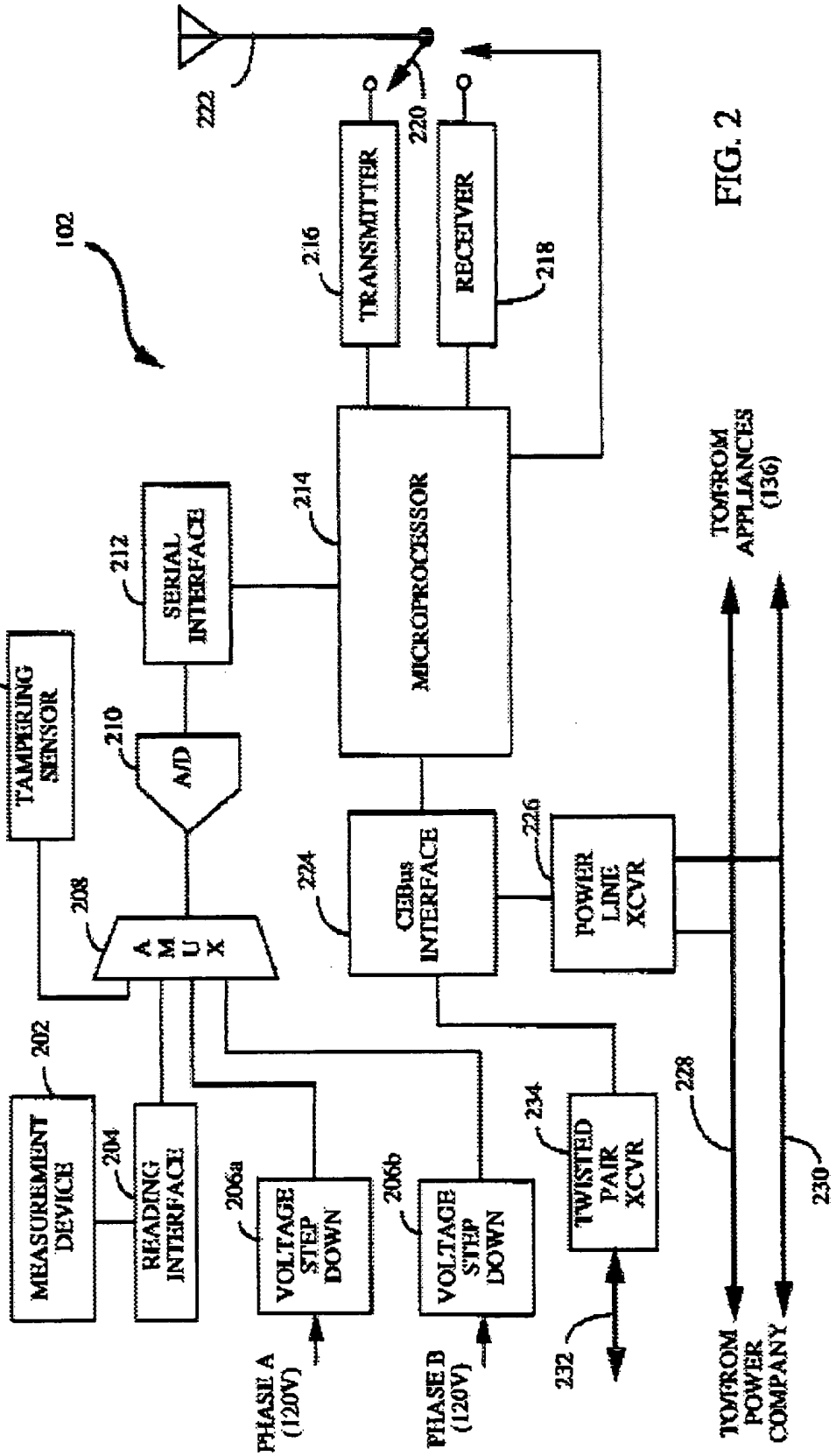
102
222
220
216
TRANSMITTER
218
RECEIVER
214
MICROPROCESSOR
212
SERIAL INTERFACE
210
A/D
238
TAMPERING SENSOR
208
A M U X
224
CEBus INTERFACE
226
POWER LINE XCVR
TO/FROM APPLIANCES (136)
202
MEASUREMENT DEVICE
204
READING INTERFACE
206a
VOLTAGE STEP DOWN
206b
VOLTAGE STEP DOWN
234
TWISTED PAIR XCVR
228
230
232
PHASE A (120V)
PHASE B (120V)
TO/FROM POWER COMPANY

FIG. 2

7. The one-to-one correspondence between Argyroudis and the instant claimed invention (claims 16 and 24) is as follows:

a) the plurality of distributed devices...are any of the remote devices of Argyroudis;

b) sensing at least one electrical parameter... is seen in any of the telemetry data (including electrical telemetry data and tampering sensor data) sensed in Argyroudis;

c) processing...to produce monitoring data and internal control information is any of the telemetry data of Argyroudis in combination with any of the internal control information of Argyroudis; see e.g. the programmable "reporting schedule" or other "control or feedback messages" of Argyroudis;

d) wirelessless transmitting... is seen in the remote wireless communication of Argyroudis;

e) receiving centralized control information... is receiving control information from from the central controller of Argyroudis;

f) applying at least one from said internal control information and said centralized control information to said associated distributed device is any of the remote devices of Argyroudis applying internal control information (alarms, scheduling, timing of reporting intervals, tamper sensor data, etc.) or responding to external control messages from the central controller; e.g. instructions to shed portions of their loads, and other control messages.

Note, the claimed monitoring and control unit, processor, transmitter, and centralized control station, are seen in at least Figs. 1-2 of Argyroudis.

8. As per dependent claim 17, see at least a discussion of the 'gateway' of demand-side services provided by the remote metering units of Argyroudis, along with the aforementioned internal/external control information above.

As per dependent claim 19, see at least the tamper sensor/switch of Argyroudis.

As per dependent claim 21, see at least the aforementioned internal/external control information indicated above.

As per dependent claim 22, see at least the central computer of Fig. 1 of Argyroudis.

As per dependent claim 23, see the aforementioned load-shedding of Argyroudis.

As per dependent claims 25-28, see at least Figs. 1-2 ofArgyroudis which include a plurality of distributed devices, a plurality of monitoring/control units , and a plurality of transmitters/receivers.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 8-9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Levy as applied to claims 1-7, 10-11, and 13-15 above, and further in view of Kelly et al. ('159) published12/26/95.

11. The difference between the instant claimed invention and that of Levy lies in the dependent claims, namely, the light sensor, the timer, and the daylight/night time information. Note that communication of command/control is possible via "any suitable way" (col. 1, lines 55-62).

12. Kelly et al. disclose an apparatus and system for street light monitoring. They particularly teach the claimed elements above in at least col. 2, lines 21-30.

13. It would have been obvious to one having ordinary skill in the art at the time the inventon was made to incorporate the light sensor, timer, and daylight/night time information of Kelly et al. into the intelligent outdoor lighting control system of Levy because scheduling or switching lights on/off at appropriate times and under certain conditions (dawn/dusk) provides valuable power savings in any outdoor lighting control system. See col. 4, lines 56-60 for motivation in Kelly et al.

14. Claims 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Argyroudis as applied to claims 16-17 above, and further in view of Kelly et al. (159) published 12/26/95

15. The difference between the instant claimed invention and that of Argyroudis lies in the claimed photosensor and sunrise/sunset schedule.

16. Kelly et al. disclose an apparatus and system for street light monitoring. They particularly teach the claimed elements above in at least col. 2, lines 21-30.

17. It would have been obvious to one having ordinary skill in the art at the time the inventon was made to incorporate the photosensor, timer and sunrise/sunset information of Kelly et al. into the wireless remote telemetry system of Argyroudis because scheduling or switching lights on/off at appropriate times and under certain conditions (dawn/dusk) provides valuable power savings in any outdoor lighting control system. See col. 4, lines 56-60 for motivation in Kelly et al.

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See the attached PTO-892.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick J Assouad whose telephone number is 571-272-2210. The examiner can normally be reached on Tues-Friday 6:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S Hoff can be reached on 571-272-2216. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patrick J Assouad
Primary Examiner
Art Unit 2857

pja